Formula I

Application No.: 10/518325 Docket No.: BA9307USPCT

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## Amendments to Claims

(Original) A method for preparing a 3-halo-4,5-dihydro-1H-pyrazole compound of

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wherein L is an optionally substituted carbon moiety;

each R is independently selected from optionally substituted carbon moieties;

k is an integer from 0 to 4;

and X1 is halogen; comprising:

contacting a 4,5-dihydro-1H-pyrazole compound of Formula II

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wherein X<sup>2</sup> is OS(O)<sub>m</sub>R<sup>1</sup>, OP(O)<sub>p</sub>(OR<sup>2</sup>)<sub>2</sub> or a halogen other than X<sup>1</sup>;

m is 1 or 2;

p is 0 or 1;

R<sup>1</sup> is selected from alkyl and haloalkyl; and phenyl optionally substituted with from 1 to 3 substituents selected from alkyl and halogen; and

each R<sup>2</sup> is independently selected from alkyl and haloalkyl; and phenyl optionally substituted with from 1 to 3 substituents selected from alkyl and halogen; with a compound of the formula HX<sup>1</sup> in the presence of a suitable solvent.

- 2. (Original) The method of Claim 1 wherein m is 2 and p is 1.
- 3. (Original) The method of Claim 2 wherein X<sup>2</sup> is halogen or OS(O)<sub>m</sub>R<sup>1</sup>.
- 4. (Original) The method of Claim 3 wherein  $X^2$  is Cl or  $OS(O)_mR^1$  and  $R^1$  is  $C_1-C_2$  alkyl, phenyl or 4-methylphenyl.
  - 5. (Original) The method of Claim 1 wherein X1 is Cl or Br.

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6. (Original) The method of Claim 1 wherein the compound of Formula I is of Formula Ia

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and the compound of Formula II is of Formula IIa

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wherein

each R³ is independently C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>2</sub>-C<sub>4</sub> alkenyl, C<sub>2</sub>-C<sub>4</sub> alkynyl, C<sub>3</sub>-C<sub>6</sub> cycloalkyl, C<sub>1</sub>-C<sub>4</sub> haloalkyl, C<sub>2</sub>-C<sub>4</sub> haloalkenyl, C<sub>2</sub>-C<sub>4</sub> haloalkynyl, C<sub>3</sub>-C<sub>6</sub> halocycloalkyl, halogen, CN, NO<sub>2</sub>, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> haloalkoxy, C<sub>1</sub>-C<sub>4</sub> alkylthio, C<sub>1</sub>-C<sub>4</sub> alkylsulfinyl, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl, C<sub>1</sub>-C<sub>4</sub> alkylamino, C<sub>2</sub>-C<sub>8</sub> dialkylamino, C<sub>3</sub>-C<sub>6</sub> cycloalkylamino, (C<sub>1</sub>-C<sub>4</sub> alkyl)(C<sub>3</sub>-C<sub>6</sub> cycloalkyl)amino, C<sub>2</sub>-C<sub>4</sub> alkylcarbonyl, C<sub>2</sub>-C<sub>6</sub> alkoxycarbonyl, C<sub>2</sub>-C<sub>6</sub> alkylaminocarbonyl, C<sub>3</sub>-C<sub>8</sub> dialkylaminocarbonyl or C<sub>3</sub>-C<sub>6</sub> trialkylsilyl;

R<sup>4</sup> is H or an optionally substituted carbon moiety;

Z is N or CR5;

R5 is H or R3; and

n is an integer from 0 to 3.

- 7. (Original) The method of Claim 6 wherein  $R^4$  is  $C_1-C_4$  alkyl.
- 8. (Original) The method of Claim 7 wherein Z is N, n is 1, and  $R^3$  is Cl or Br and is at the 3-position.
- 9. (Original) The method of Claim 7 wherein  $X^1$  is Br,  $X^2$  is C1 or  $OS(O)_mR^1$ , m is 2, and  $R^1$  is phenyl or 4-methylphenyl.

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## (Currently Amended) A method of preparing a compound of Formula III 10.

$$R^{6}$$
 $NH$ 
 $Z$ 
 $R^{3}$ 
 $R^{3}$ 
 $R^{3}$ 
 $R^{3}$ 
 $R^{3}$ 

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wherein

X1 is halogen;

each  ${\rm R}^3$  is independently  ${\rm C}_1{\rm -C}_4$  alkyl,  ${\rm C}_2{\rm -C}_4$  alkenyl,  ${\rm C}_2{\rm -C}_4$  alkynyl,  ${\rm C}_3{\rm -C}_6$ cycloalkyl,  $C_1$ – $C_4$  haloalkyl,  $C_2$ – $C_4$  haloalkenyl,  $C_2$ – $C_4$  haloalkynyl,  $C_3$ – $C_6$ halocycloalkyl, halogen, CN, NO<sub>2</sub>,  $C_1$ - $C_4$  alkoxy,  $C_1$ - $C_4$  haloalkoxy,  $C_1$ - $C_4$ alkylthio,  $C_1$ – $C_4$  alkylsulfinyl,  $C_1$ – $C_4$  alkylsulfonyl,  $C_1$ – $C_4$  alkylamino,  $C_2$ – $C_8$ dialkylamino, C3-C6 cycloalkylamino, (C1-C4 alkyl)(C3-C6 cycloalkyl)amino,  $C_2$ - $C_4$  alkylcarbonyl,  $C_2$ - $C_6$  alkoxycarbonyl,  $C_2$ - $C_6$  alkylaminocarbonyl, C<sub>3</sub>-C<sub>8</sub> dialkylaminocarbonyl or C<sub>3</sub>-C<sub>6</sub> trialkylsilyl;

Z is N or CR5;

 $\mathbb{R}^5$  is H or  $\mathbb{R}^3$ ;

R6 is CH3, F, Cl or Br;

R7 is F, Cl, Br, I or CF3;

R8a is C1-C4 alkyl;

R8b is H or CH3; and

n is an integer from 0 to 3

wherein using a compound of Formula Ia

wherein R4 is H or an optionally substituted carbon moiety, is used as an intermediate during said preparation; characterized by:

preparing said compound of Formula Ia by the method of Claim 6.

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- (Original) The method of Claim 10 wherein R4 is C1-C4 alkyl. 11.
- (Original) The method of Claim 11 wherein Z is N, n is 1, and  $\mathbb{R}^3$  is Cl or Br and 12. is at the 3-position.
- (Original) The method of Claim 11 wherein X1 is Br, X2 is Cl or OS(O)<sub>m</sub>R1, m is 13. 2, and R1 is phenyl or 4-methylphenyl.
  - (New) A method of preparing a compound of Formula III 14.

$$R^{6}$$
 $NH$ 
 $Z$ 
 $(R^{3})_{n}$ 
 $(R^{3})_{n}$ 

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wherein

X1 is halogen;

each  ${
m R}^3$  is independently  ${
m C}_1$ – ${
m C}_4$  alkyl,  ${
m C}_2$ – ${
m C}_4$  alkenyl,  ${
m C}_2$ – ${
m C}_4$  alkynyl,  ${
m C}_3$ – ${
m C}_6$ cycloalkyl,  $C_1$ – $C_4$  haloalkyl,  $C_2$ – $C_4$  haloalkenyl,  $C_2$ – $C_4$  haloalkynyl,  $C_3$ – $C_6$ halocycloalkyl, halogen, CN, NO2, C1-C4 alkoxy, C1-C4 haloalkoxy, C1-C4 alkylthio,  $C_1$ – $C_4$  alkylsulfinyl,  $C_1$ – $C_4$  alkylsulfonyl,  $C_1$ – $C_4$  alkylamino,  $C_2$ – $C_8$ dialkylamino,  $C_3$ - $C_6$  cycloalkylamino,  $(C_1$ - $C_4$  alkyl) $(C_3$ - $C_6$  cycloalkyl)amino,  $C_2$ - $C_4$  alkylcarbonyl,  $C_2$ - $C_6$  alkoxycarbonyl,  $C_2$ - $C_6$  alkylaminocarbonyl,  $C_3$ - $C_8$ dialkylaminocarbonyl or C3-C6 trialkylsilyl;

Z is N or CR5;

 $R^5$  is H or  $R^3$ ;

R6 is CH3, F, Cl or Br;

R7 is F, Cl, Br, I or CF3;

 $\mathbb{R}^{8a}$  is  $\mathbb{C}_1$ — $\mathbb{C}_4$  alkyl;

R8b is H or CH3; and

n is an integer from 0 to 3

using a compound of Formula Ia

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wherein R4 is H or an optionally substituted carbon moiety, by for example,

(1) providing a compound of Formula 6 wherein R<sup>4</sup> is H by (a) oxidizing a compound of Formula Ia to form a compound of Formula 6;

$$(R^3)_n$$
 $Z$ 
 $N$ 
 $X^1$ 
 $CO_2R^4$ 

- (b) if R<sup>4</sup> for the compound of Formula 6 formed in (a) is an optionally substituted carbon moiety, hydrolyzing said compound of Formula 6 formed in (a);
- (2) providing a compound of Formula 8 either by (c) coupling said compound of Formula 6 wherein R<sup>4</sup> is H provided in (1) with a compound of Formula 7; or by

$$\mathbb{R}^{7}$$
 $\mathbb{N}^{1}$ 
 $\mathbb{N}^{1}$ 

- (d1) chlorinating said compound of Formula 6 wherein R<sup>4</sup> is H provided in (1) to form a compound of Formula 10; and
  - (d2) coupling said compound of Formula 10 with a compound of Formula 9; and

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$$\mathbb{R}^{7}$$
 $\mathbb{R}^{6}$ 
 $\mathbb{H}$ 
 $\mathbb{R}^{7}$ 
 $\mathbb{R}^{6}$ 
 $\mathbb{H}$ 
 $\mathbb{R}^{7}$ 
 $\mathbb{R}^{6}$ 
 $\mathbb{R}^{7}$ 
 $\mathbb{R}^{7}$ 
 $\mathbb{R}^{7}$ 
 $\mathbb{R}^{7}$ 
 $\mathbb{R}^{7}$ 
 $\mathbb{R}^{7}$ 
 $\mathbb{R}^{7}$ 

(3) reacting said compound of Formula 8 provided in (2) with a compound of Formula 11.

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characterized by:

preparing said compound of Formula Ia by the method of Claim 6.

- 15. (New) The method of Claim 14 wherein  $\mathbb{R}^4$  in the compound of Formula Ia is  $C_1$ - $C_4$  alkyl.
- 16. (New) The method of Claim 15 wherein Z is N, n is 1, and R<sup>3</sup> is Cl or Br and is at the 3-position.
- 17. (New) The method of Claim 15 wherein  $X^1$  is Br,  $X^2$  is Cl or  $OS(O)_mR^1$ , m is 2, and  $R^1$  is phenyl or 4-methylphenyl.